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Lutetium Lu 177-Edotreotide

National Cancer Institute

Source

National Cancer Institute. *Lutetium Lu 177-Edotreotide*. NCI Thesaurus. Code C88277.

A radioconjugate consisting of the somatostatin analogue edotreotide labeled with lutetium Lu 177 with potential antineoplastic activities. Lutetium Lu 177-edotreotide binds to somatostatin receptors (SSTRs), with high affinity to type 2 SSTR, present on the cell membranes of many types of neuroendocrine tumor cells. Upon binding and internalization, this radioconjugate specifically delivers a cytotoxic dose of beta radiation to SSTR-positive cells. Edotreotide is produced by substituting tyrosine for phenylalanine at the 3 position of the somatostatin analogue octreotide (Tyr3-octreotide or TOC) and chelated by the bifunctional, macrocyclic chelating agent dodecanetetraacetic acid (DOTA).